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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,915	12/12/2005	Tetsuji Zama	3103-112	2364

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EXAMINER

HARRIS, GARY D

ART UNIT	PAPER NUMBER
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1773

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,915	ZAMA ET AL.	
	Examiner	Art Unit	
	Gary D. Harris	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/5/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3, 6 and 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1,2,4,5,7-10, drawn to a polymer composite structure.

Group II, claim(s) 6,11-15, drawn to a process.

Group III, claim(s) 3, drawn to an actuator.

The inventions listed as Groups I, II & III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is drawn to a polymer composite structure, while Group II is a process for making a polymer composite structure. The polymer composite structure could be made by a different process (one without coiled springs). Groups III is related to an actuator which is not a required feature of either Group I and/or Group II.

During a telephone conversation with Richard Auchterlonie on March 26, 2007 a provisional election was made with traverse to prosecute the invention of Group I, claims 1, 2, 4, 5, 7-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3, 6, 11-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 1773

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood:

(Paragraph 0003) A common electrochemical polymerization method includes by adding monomer components such as pyrrole and the like in electrolytic solution, providing a working electrode and a counter electrode in this electrolyte, and applying voltage between the electrodes, thereby forming conductive polymers as films on the working electrode (e.g. see pages 70 to 73, "Conductive polymers" 8.sup.th edition by Naoya Ogata, published by Scientific K. K, Feb. 10, 1990").

(Paragraph 007) In order to solve the above problem, as a means to obtain large electrochemical strain of conductive polymer elements, one idea of pasting highly conductive metal films on surfaces of conductive polymer elements may be considered. (Passing or pasting?) Translation is difficult to understand.

(Paragraph 0039) In FIG. 5, conductive polymer composite structures 12 are tubular conductive polymer composite structures obtained by jointing metal wires 13 or 13' at both ends of coiled metal spring-type members in the length direction as a conductive substrate, connecting said metal wires 13 and 13' to a power supply and generating conductive polymers on a conductive substrate by a publicly known electrochemical polymerization method. What is publicly known?

Examiner notes that the translation of the "entire specification" is difficult to interpret.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 4, 5 & 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshawa et al. US 4,948,685.

As to Claims 1 & 2, Oshawa et al. '685 discloses a composite electrode coated with a polymeric material (Col. 29, Line 15-21). Oshawa et al. '685 does not disclose the conductivity not less than 1.0×10^3 S/cm. However, Claim 1,2,4 seems to be identical, except that the prior art is silent as to the inherent characteristics. These properties are inherent because the applicants and the inventors teach virtually identical structures with similar materials. The physical properties of similar materials will inherently be similar. The burden of proof is shifted to the applicant to show the prior art properties are different from those claimed. See *In re Fitzgerald*, 619 F. 2d 67, 205 USPQ 594 (CCPA 1980).

As to Claim 5, Oshawa et al. '685 illustrates a spiral cylinder laminated sheet (Figure 12).

As to Claim 8 & 10, Oshawa et al. '685 discloses pressing composite electrolyte (Col. 11, Line 5-18).

Claims 7 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshawa et al. US 4,948,685 as applied to claims 1, 2, 4, 5 7, 8 & 10 above, and further in view of Charpentier et al. US 6,914,105.

Oshawa et al. '685 does not disclose a device for driving parts (examiner interprets driving parts as conveyance). However, Charpentier et al. US 6,914,105 teaches the use of a continuous process for moving parts (Col. 9, Line 19-36). Conveyance of parts is well known in the industry and would have been obvious to one skilled in the art to combine the teaching of Charpentier et al. US 6,914,105 in the Oshawa et al. '685 invention.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary D. Harris whose telephone number is 571-272-6508. The examiner can normally be reached on 8AM - 5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol D. Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GH



CAROL CHANEY
SUPERVISORY PATENT EXAMINER